heat transfer medium forming a heat gradient within the enclosed controlled low temperature solidification environment;

[applying a charge to ] breaking the stream of material [as the stream exits the orifice and breaks] up into a plurality of uniform sized and shaped liquid spheres, and

[passing the charged liquid spheres through an electric field to deflect the liquid spheres, and]

allowing the liquid spheres to pass through the heat transfer medium in the enclosed controlled low temperature solidification environment to cool and solidify into the uniform sized and shaped solid spheres.

a1

a2

15. (Amended) The method of claim [1] 29, in which the deflection means comprises two spatially separated surfaces and comprising generating the electrical field between the two surfaces to deflect the descending spheres.

16. (Amended) A method for forming uniform sized and shaped spheres comprising the steps of:

providing a supply of a low viscosity liquid material in a crucible,

applying a minute periodic disturbance to the low viscosity liquid material in the crucible,

applying a pressure to the low viscosity liquid material, the pressure forcing the material through at least one orifice in the crucible as a steady laminar stream, the stream of the material exiting into an enclosed controlled temperature solidification environment;

[applying a charge to] breaking the stream of material [as the stream exits the orifice and breaks] up into a plurality of uniform sized and shaped liquid spheres; and

[passing the charged liquid spheres through an electric field to deflect liquid the spheres; and]

allowing the spheres to pass through first and second media in an enclosed controlled temperature solidification environment to cool and solidify the spheres;

the enclosed controlled temperature solidification environment including a first, gaseous environment through which the charged spheres are passed, the first, gaseous environment containing the first medium which comprises a spray of cooling fluid, liquefied gas or halocarbon, the first medium evaporating in the enclosed controlled temperature solidification environment and absorbing the heat of fusion from the spheres;

the enclosed controlled temperature solidification environment also including a second, liquid environment through which the spheres pass after passing through the first, gaseous environment, the second, liquid environment containing the second medium which comprises a supply of a liquid material, the second medium cushioning the spheres before the spheres contact a bottom of the enclosed controlled temperature solidification environment.

Please add claims 29-31 as follows.

29. (New) The method of claim 1, further comprising steps of:
applying a charge to the stream of material as the stream exits the orifice; and
passing the charged liquid spheres through an electric field to deflect the liquid spheres.

30. (New) The method of claim 16, further comprising steps of:
applying a charge to the stream of material as the stream exits the orifice; and
passing the charged liquid spheres through an electric field to deflect the liquid spheres.

31. (New) A method for forming and solidifying uniform sized and shaped solid spheres comprising the steps of:

applying a pressure to low viscosity liquid material contained in a crucible, the pressure forcing the material through at least one orifice in the crucible as a steady laminar stream, the stream of the material exiting into an enclosed controlled low temperature solidification environment having a temperature of less than about 0° C., the enclosed controlled low temperature solidification environment containing at least one